

ABSTRACT OF THE DISCLOSURE

A CDMA communication system comprises a base station and a mobile station. In the mobile station, a pilot demodulator demodulates first and second pilot signals by reception path using 5 antenna pilot demodulators. An antenna phase difference calculator determines phase difference Angle(n) for the first and second pilot signals on each reception path. By vector-adding phase difference Angle(1), Angle(2), ..., Angle(n), average Angle\_a is determined as the average phase difference Angle(1), Angle(2), 10 ..., Angle(n). This average Angle\_a is used as the phase difference data for a feedback control in the base station.

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